

In the Claims

Please amend claims 2-21 as follows:

2. (Amended) A pneumatically driven electric power generator, according to claim 1, wherein said sealing means is an O-ring in a groove formed on said outer surface of said first portion of said piston.

3. (Amended) A pneumatically driven electric power generator, according to claim 1, wherein said inlet flowpath includes an air filter for excluding foreign material from said cylinder.

4. (Amended) A pneumatically driven electric power generator, according to claim 1, wherein said inlet flowpath includes a choke to control an impedance of said inlet flowpath.

5. (Amended) A pneumatically driven electric power generator, according to claim 1, wherein said generator further includes an exhaust passage connected to at least one of said cylinder extension and said end closure.

6. (Amended) A pneumatically driven electric power generator, according to claim 5, wherein said piston further includes a piston extension at least one of formed integrally with and attached to said piston, at least a portion of said piston extension contacting at least a portion of said cylinder extension to provide positional constraint to said piston.

7. (Amended) A pneumatically driven electric power generator, according to claim 6, wherein said portion of said piston extension contacting at least a portion of said cylinder extension is an outer surface of said piston extension and said portion of said cylinder extension is an inner surface of said cylinder extension.

8. (Amended) A pneumatically driven electric power generator, according to claim 7, wherein at least one of said outer surface of said piston extension and said inner surface of said cylinder extension is at least one of made from and coated with a low friction material.

9. (Amended) A pneumatically driven electric power generator, according to claim 6, wherein said piston extension

has at least one longitudinal air passage to carry air to an end of said piston adjacent said end closure, said exhaust being connected to said end closure.

10. (Amended) A pneumatically driven electric power generator, according to claim 9, wherein said at least one longitudinal air passage is a longitudinal slot formed in said outer surface of said piston extension.

11. (Amended) A pneumatically driven electric power generator, according to claim 1, wherein said biasing means is a spring.

12. (Amended) A pneumatically driven electric power generator, according to claim 11, wherein said spring is a compression spring disposed between said piston extension and said end closure.

13. (Amended) A pneumatically driven electric power generator, according to claim 5, wherein said exhaust passage includes a muffler to reduce noise released from said generator.

14. (Amended) A pneumatically driven electric power generator, according to claim 5, wherein said exhaust passage includes an electrically actuated shutoff valve to prevent air flow through said generator, thereby turning off said generator.

15. (Amended) A pneumatically driven electric power generator, according to claim 1, wherein said inlet flowpath includes an electrically actuated shutoff valve to prevent air flow through said generator, thereby turning off said generator.

16. (Amended) A pneumatically driven electric power generator, according to claim 1, wherein said at least one electric coil is connected to a rectifier to supply DC electric power.

17. (Twice Amended) A pneumatically driven electric power generator, according to claim 16, wherein said rectifier is a full bridge rectifier to supply DC electric power whenever a net flux through said at least one electric coil is changing.

18. (Twice Amended) A pneumatically driven electric power generator, according to claim 6, wherein said magnetic moment associated with said piston is provided by a magnet attached to at least one of said piston and said piston extension.

19. (Twice Amended) A pneumatically driven electric power generator, according to claim 6, wherein said magnetic moment associated with said piston is provided by forming at least one of said piston and said piston extension of a material having a magnetic moment.

20. A pneumatically driven electric power generator comprising:

a first cylinder having a first end connectable through a first inlet flowpath to an air supply passage, a second end of said first cylinder being open;

a first cylinder extension at least one of formed integrally with and attached to said first cylinder, said first cylinder extension having an inner surface having a transverse dimension greater than a transverse dimension of said first cylinder;

a second cylinder having a first end connectable through a second inlet flowpath to said air supply passage, a second end of said second cylinder being open;

a second cylinder extension at least one of formed integrally with and attached to said second cylinder, said second cylinder extension having an inner surface having a transverse dimension greater than a transverse dimension of said second cylinder;

a means for connecting said first cylinder extension and said second cylinder extension;

a common exhaust for said first cylinder and said second cylinder;

a single piston having a magnetic moment associated therewith, said single piston having a first end portion and a second end portion, said single piston being positionable in a first location wherein said first end portion of said single piston is disposed within said first cylinder and said second end portion of said single piston is disposed outside of said second cylinder, said single piston further being positionable in a second location wherein said second end portion of said single piston is disposed within said second cylinder and said first portion of said single piston is outside of said first cylinder[;],

so that when said single piston is disposed in said first position, air pressure received in said first cylinder through said first inlet flowpath drives said single piston toward said second position, whereupon said first cylinder exhausts, and when said single piston is disposed in said second position, air pressure received in said second cylinder through said second inlet flowpath drives said single piston toward said first position, whereupon said second cylinder exhausts, so that said single piston oscillates; and

at least one electric coil placed to enclose changing magnetic flux caused by said magnetic moment associated with said piston whereby an emf is generated in said electric coil, so that an external circuit connected to said electric coil receives electric power from said electric coil.

21. (Amended) A pneumatically driven electric power generator, according to claim 20, wherein said generator further includes a spring engaging said piston to bias said piston toward one of said first position and said second position to facilitate starting said generator when air is supplied through said first air supply passage and said second air supply passage.